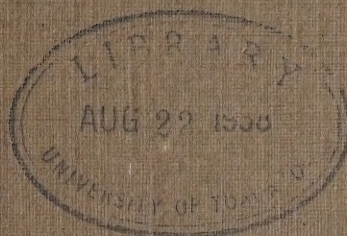
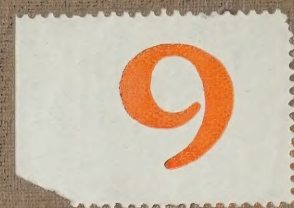


CA20N
Z1
-22H001
#9a

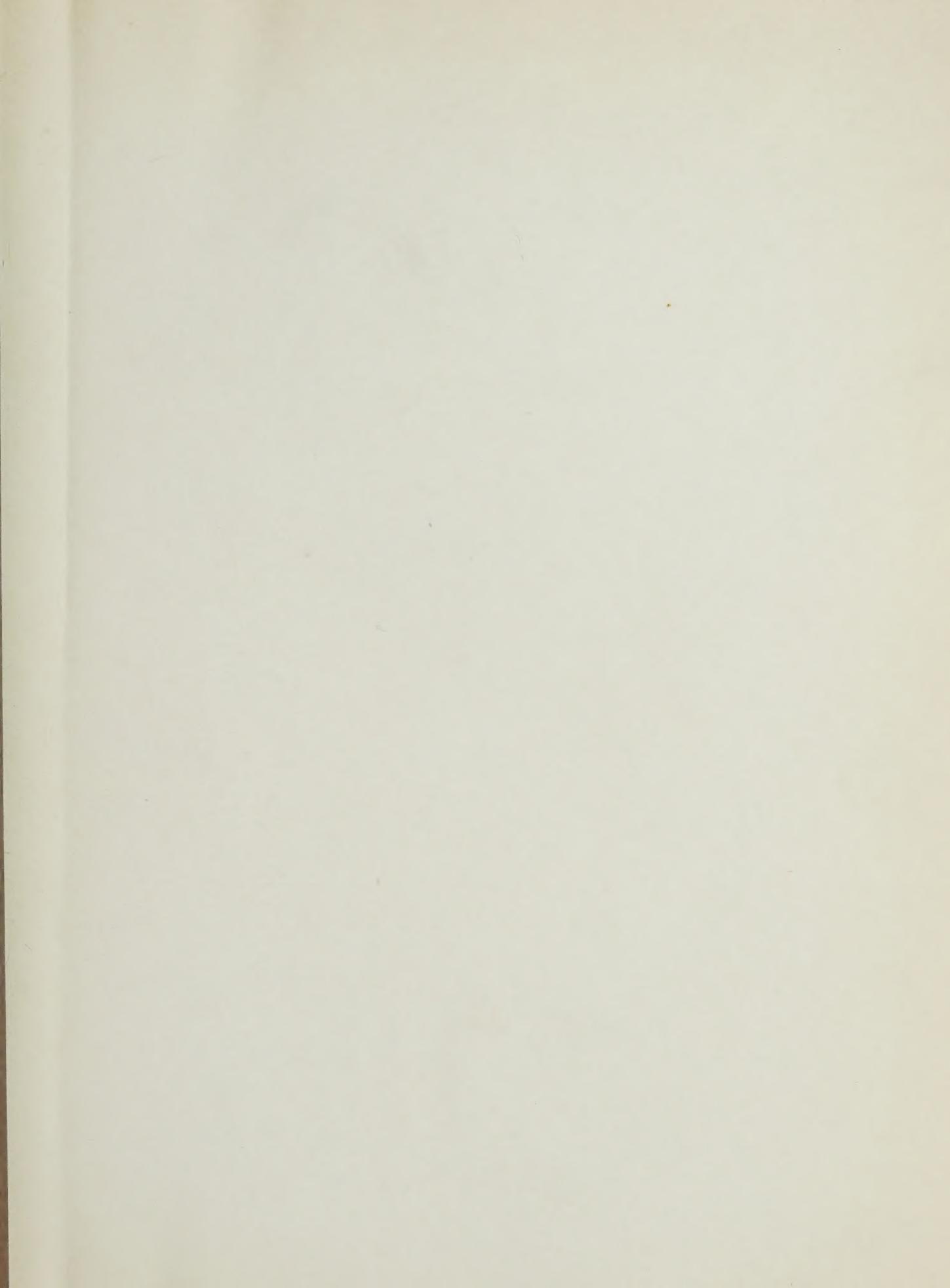
3 1761 11853874 3




HYDRO-ELECTRIC INQUIRY COMMISSION

REPORT
ON
OTTAWA SYSTEM

W. D. GREGORY, CHAIRMAN
M. J. HANEY
LLOYD HARRIS
J. ALLAN ROSS
R. A. ROSS
COMMISSIONERS
JOSEPH H. W. BOWER
SECRETARY





Digitized by the Internet Archive
in 2023 with funding from
University of Toronto

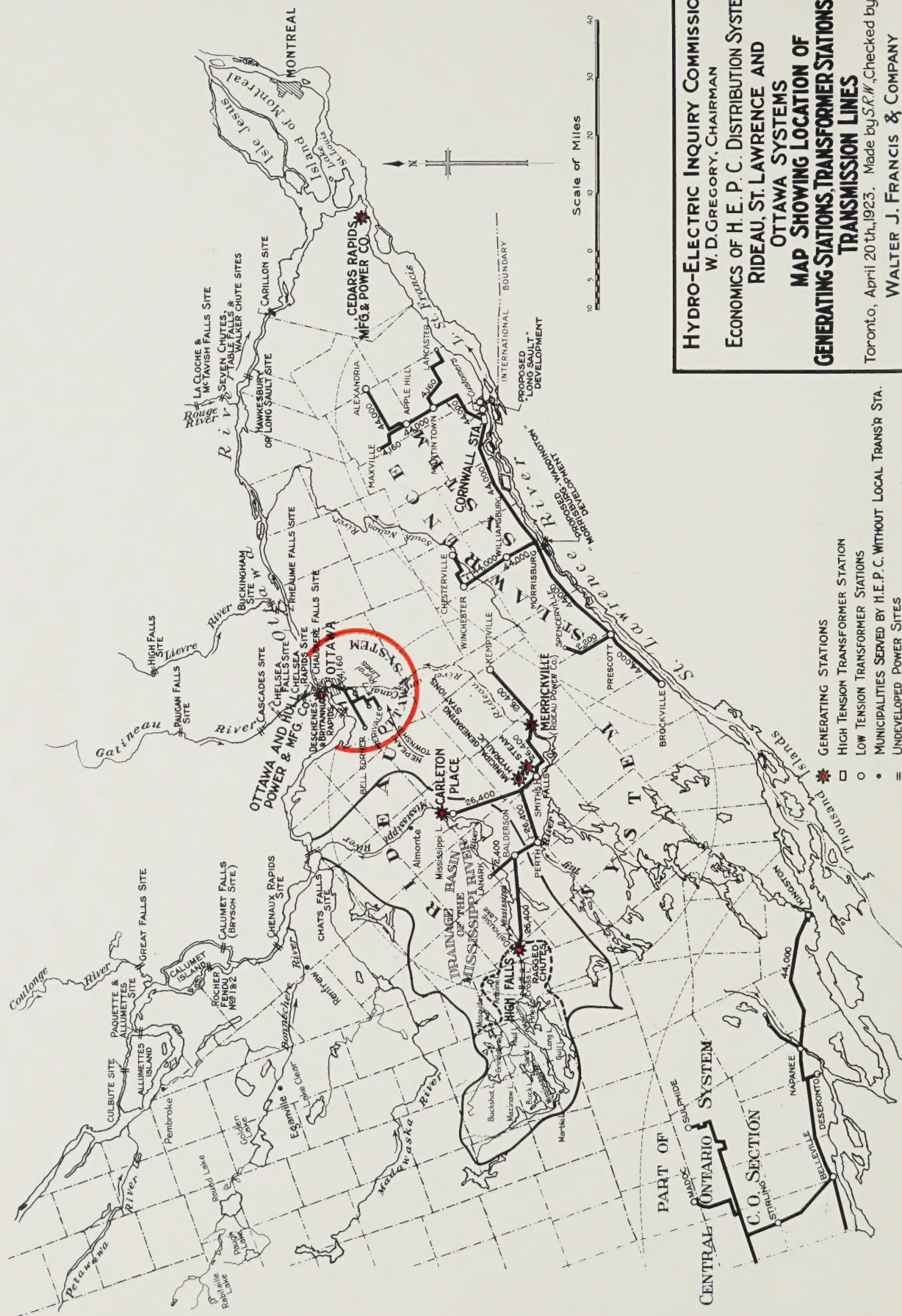
<https://archive.org/details/31761118538743>

O T T A W A S Y S T E M

COPY

OFFICE OF THE SECRETARY

COPY



HYDRO-ELECTRIC INQUIRY COMMISSION
W. D. GREGORY, CHAIRMAN
ECONOMICS OF H. E. P. C. DISTRIBUTION SYSTEMS
RIDEAU, ST. LAWRENCE AND
OTTAWA SYSTEMS
MAP SHOWING LOCATION OF
GENERATING STATIONS, TRANSFORMER STATIONS AND
TRANSMISSION LINES

Toronto, April 20th, 1923. Made by S.R.W., Checked by *[initials]*
WALTER J. FRANCIS & COMPANY
 CONSULTING ENGINEERS

- GENERATING STATIONS**
- ★ HIGH TENSION TRANSFORMER STATION
 - LOW TENSION TRANSFORMER STATIONS
 - MUNICIPALITIES SERVED BY H.E.P.C. WITHOUT LOCAL TRANS. STA.
 - = UNDEVELOPED POWER SITES
 - TRANSMISSION LINE VOLTAGE SHOWN THUS — 44,000

Showing Location of

Octave System

Hydro Electric Power Commission

W. D. Macdonald, C.E.

Compiled by H. P. C. Macdonald, C.E.

Revised by J. Macdonald, C.E.

Revised by J. Macdonald, C.E.

Revised by J. Macdonald, C.E.

Revised by J. Macdonald, C.E.

Revised by J. Macdonald, C.E.

Revised by J. Macdonald, C.E.

Revised by J. Macdonald, C.E.

Revised by J. Macdonald, C.E.

Revised by J. Macdonald, C.E.

Revised by J. Macdonald, C.E.

Revised by J. Macdonald, C.E.



Map Series

COBY

Map Series

His Honour Henry Cookshutt,

Lieutenant-Governor of the Province of Ontario.

May it please Your Honour:-

Amongst the undertakings of the Hydro-Electric Power Commission of Ontario (hereinafter referred to as "the Commission") to which inquiry and investigation was directed in pursuance of the instructions contained in Your Honour's Commission to us, was that known as the Ottawa System. In respectfully submitting the following report upon the system we transmit therewith reports made to us by our Consulting Engineer, Mr. **COPY** J. Francis and our Accountants, Messrs. Price, Waterhouse & Company.

Location of System

The map prepared by Mr. Francis and inserted as a preface to this report indicates the location of the Ottawa System and its position in relation to other systems of the Commission. The system comprises the City of Ottawa and part of the County of Carleton. Rural lines extend to Bell's Corners and Merivale to the south and west of the City and are served from the municipal distributing system of the city.

Historical Sketch

The system had its inception on July 31st, 1907, when the Commission contracted with the City of Ottawa to supply the power required for its municipal operations. On the same day, the Commission signed a contract with the Ottawa & Hull

Mr. Robert Henry Gossens.

Director-General of the Bureau of Census.

May 14, 1949 - New York

Enclosed for the Bureau of the Census are two copies of a report of the Commission of the District of Columbia on the subject of "The Commission of the District of Columbia on the subject of the District of Columbia". The report was prepared by the Commission of the District of Columbia and is dated May 14, 1949. The report contains a detailed account of the Commission's activities and findings. The Commission was organized in 1947 to study the problems of the District of Columbia and to make recommendations to the Congress. The Commission has held numerous public hearings and has received many suggestions from the people of the District. The report contains a list of the Commission's recommendations, which are as follows:

RECOMMENDATIONS

The report was prepared by Mr. Gossens and is dated May 14, 1949. The report contains a detailed account of the Commission's activities and findings. The Commission was organized in 1947 to study the problems of the District of Columbia and to make recommendations to the Congress. The Commission has held numerous public hearings and has received many suggestions from the people of the District. The report contains a list of the Commission's recommendations, which are as follows:

RECOMMENDATIONS

The report was prepared by Mr. Gossens and is dated May 14, 1949. The report contains a detailed account of the Commission's activities and findings. The Commission was organized in 1947 to study the problems of the District of Columbia and to make recommendations to the Congress. The Commission has held numerous public hearings and has received many suggestions from the people of the District. The report contains a list of the Commission's recommendations, which are as follows:

Power & Manufacturing Company, which owns two generating plants on the Quebec side of the Ottawa River at Chaudiere Falls, to purchase sufficient electric power to meet the requirements of the city. Under this contract the company agreed to sell to the Commission 1,500 electrical horse-power at the flat rate of \$15.00 per horse-power per year, and to supply additional power at the same rate up to 1,000 horse-power, making a maximum of 2,500 horse-power. The period of the contract was ten years and in it the company agreed to deliver the power to the city at the city limits at Chaudiere Bridge.

The power requirements of the city increased very rapidly and soon exceeded the maximum amount available under the contracts mentioned above. **COPY** and on December 6th, 1910, amending agreements were entered into, increasing the maximum horse-power available to 4,000 horse-power at the same rate of \$15.00 per horse-power per year.

The load of the city continued to increase rapidly. In 1912 about 3,100 horse-power was being purchased, and by the end of 1913 the demand again exceeded the total amount included in the contracts, thus necessitating further provision for power.

An agreement between the Commission and the company was made on December 8th, 1913, superseding all previous agreements between the two parties and providing for the delivery of from 5,000 horse-power to 20,000 horse-power at rates ranging from \$14.00 per horse-power for the minimum requirements to \$11.00 per horse-power when the load on the system should

reach 18,000 horse-power. This agreement which was to remain in force for a period of thirteen years provided, at the option of the Commission, for its renewal for one or two further terms of ten years, notice to be given to the company by the Commission of its intention to renew the agreement at least two years before the expiration of the term of years then in force.

There is a clause in this contract prohibiting the company from supplying power to any municipality, person, firm or corporation while such municipality, person, firm or corporation is supplied by the Commission; and at the same time the Commission is restricted to purchasing power entirely from the company for use in Ottawa or within a radius of five miles of the company's power house.

COPY
The Order-in-Council approving this agreement is dated March 4th, 1914, and is as follows:

"Upon the recommendation of the Hydro-Electric Power Commission of Ontario, the Committee of Council advise that the accompanying contract entered into between the Ottawa & Hull Power & Manufacturing Company and the said Commission, bearing date the eighth day of December, 1913, for the supply of from 5,000 to 18,000 horse-power of electrical power at or near the Corporation of the City of Ottawa, be approved by Your Honour".

On February 2nd, 1914, an agreement between the Commission and the city was entered into to conform to the revised agreement made during the preceding December with the Ottawa & Hull Power & Manufacturing Company. This agreement with the city, which supersedes all previous agreements, provides for the purchase of power at rates equivalent to those paid by the Commission to the company, together with operating costs,

interest on the capital investment made by the Commission, and payments to the reserve accounts. It is to remain in force for a period of ten years from the date of the first delivery of power under it, and may be continued, at the option of the city, for one or two further consecutive terms of ten years each.

The demand on the system continued to increase steadily, necessitating orders for additional blocks of power from time to time. The load during October, 1921, 9,098 horse-power, is an increase of about 1,500 horse-power over that in 1920. This was in excess of the amount officially ordered from the power company, and steps were at once taken to provide for further increases. In 1922, the peak demand was 11,394 horse-power, and the load early in 1923 was over 12,000 horse-power.

Consequent to applications for electricity made to the Commission, an agreement was entered into with the Township of Nepean on August 25th, 1921, under provisions of the Power Commission Act, "to provide for the supply of electrical energy or power to individual users". An Order-in-Council dated September 20th, 1921, authorized this contract, and also authorized the Commission to construct twelve miles of transmission lines to serve rural districts.

This was followed by Order-in-Council under dates of November 29th, 1921, and June 23rd, 1922, granting the authority to further construct 6.61 miles and 6.50 miles of transmission lines, respectively.

The construction of rural lines on the system was commenced in September, 1921. The first twelve miles were completed in February, 1922, and certain consumers in Nepean were then served with electrical energy. Six additional miles of rural lines were completed during October, 1922, all the rural lines serving a total of eighty-five rural consumers at that date. Since then application for electricity has been made by twenty-five other additional customers, and it is stated that the lines to supply these are now under construction.

The rural lines are being served with power from the Ottawa municipal distributing system. The power supplied is being metered by the city which is reimbursed at a rate which includes the cost of operation, transformation and line losses at an agreed flat rate of \$21.00 per horse-power, thus showing operating and transfer costs of \$8.00 per horse-power in addition to the wholesale cost of power to the city, which is now \$13.00 per horse-power. On June 29th, 1922, the Commission authorized payments to the city for all power supplied to the rural lines of the system at the above rate of \$21.00 per horse-power.

The power supply to the Commission is measured by the company's meters and checked by the Commission's meters installed in the power house of Plant No.2, and it is then transmitted to the distributing station of the city through underground cables at 11,000 volts. The Ottawa & Hull Power & Manufacturing Company also sells large blocks of power to the Ottawa Light, Heat & Power Company, to

the Hull Electric Company, and to a large number of important industries located in the district of the city.

The Ottawa & Hull Power & Manufacturing Company is said to be contemplating the development of 30,000 or 40,000 horse-power in 1923 or 1924 at Bryson, Quebec, on the Ottawa River at Colinet Island.

Undeveloped Power Sites

There are numerous undeveloped power sites in the Provinces of Ontario and Quebec within short transmission distance of the Ottawa and Rideau Systems. These sites, a list of which is given in our Consulting Engineer's report, and the most distant of which is about 75 miles from the City of Ottawa, aggregate over one million horse-power, and are all a possible source of power supply. There is also a large number of smaller powers in the district which are not included in the table.

Miscellaneous Power Plants in the District

There are several hydro-electric developments of magnitude in the district of the Ottawa System besides the plants of the Ottawa & Hull Power & Manufacturing Company. Most of these are used to supply electrical energy to the various industries which operate them, but the plants of the Ottawa Light, Heat & Power Company and of the Hull Electric Company are for public utility use.

The main competitor of the Hydro-Electric Power Commission in the district included as the Ottawa System is the Ottawa

the Gulf Nicotiana glauca, and in a large number of specimens
collected in the district of the city.

Five of Colored Island.

1981-1982, 1983-1984, 1985-1986, 1987-1988, 1989-1990, 1991-1992, 1993-1994, 1995-1996, 1997-1998, 1999-2000, 2001-2002, 2003-2004, 2005-2006, 2007-2008, 2009-2010, 2011-2012, 2013-2014, 2015-2016, 2017-2018, 2019-2020, 2021-2022, 2023-2024, 2025-2026, 2027-2028, 2029-2030, 2031-2032, 2033-2034, 2035-2036, 2037-2038, 2039-2040, 2041-2042, 2043-2044, 2045-2046, 2047-2048, 2049-2050, 2051-2052, 2053-2054, 2055-2056, 2057-2058, 2059-2060, 2061-2062, 2063-2064, 2065-2066, 2067-2068, 2069-2070, 2071-2072, 2073-2074, 2075-2076, 2077-2078, 2079-2080, 2081-2082, 2083-2084, 2085-2086, 2087-2088, 2089-2090, 2091-2092, 2093-2094, 2095-2096, 2097-2098, 2099-2100, 2101-2102, 2103-2104, 2105-2106, 2107-2108, 2109-2110, 2111-2112, 2113-2114, 2115-2116, 2117-2118, 2119-2120, 2121-2122, 2123-2124, 2125-2126, 2127-2128, 2129-2130, 2131-2132, 2133-2134, 2135-2136, 2137-2138, 2139-2140, 2141-2142, 2143-2144, 2145-2146, 2147-2148, 2149-2150, 2151-2152, 2153-2154, 2155-2156, 2157-2158, 2159-2160, 2161-2162, 2163-2164, 2165-2166, 2167-2168, 2169-2170, 2171-2172, 2173-2174, 2175-2176, 2177-2178, 2179-2180, 2181-2182, 2183-2184, 2185-2186, 2187-2188, 2189-2190, 2191-2192, 2193-2194, 2195-2196, 2197-2198, 2199-2200, 2201-2202, 2203-2204, 2205-2206, 2207-2208, 2209-2210, 2211-2212, 2213-2214, 2215-2216, 2217-2218, 2219-2220, 2221-2222, 2223-2224, 2225-2226, 2227-2228, 2229-2230, 2231-2232, 2233-2234, 2235-2236, 2237-2238, 2239-2240, 2241-2242, 2243-2244, 2245-2246, 2247-2248, 2249-2250, 2251-2252, 2253-2254, 2255-2256, 2257-2258, 2259-2260, 2261-2262, 2263-2264, 2265-2266, 2267-2268, 2269-2270, 2271-2272, 2273-2274, 2275-2276, 2277-2278, 2279-2280, 2281-2282, 2283-2284, 2285-2286, 2287-2288, 2289-2290, 2291-2292, 2293-2294, 2295-2296, 2297-2298, 2299-2300, 2301-2302, 2303-2304, 2305-2306, 2307-2308, 2309-2310, 2311-2312, 2313-2314, 2315-2316, 2317-2318, 2319-2320, 2321-2322, 2323-2324, 2325-2326, 2327-2328, 2329-2330, 2331-2332, 2333-2334, 2335-2336, 2337-2338, 2339-2340, 2341-2342, 2343-2344, 2345-2346, 2347-2348, 2349-2350, 2351-2352, 2353-2354, 2355-2356, 2357-2358, 2359-2360, 2361-2362, 2363-2364, 2365-2366, 2367-2368, 2369-2370, 2371-2372, 2373-2374, 2375-2376, 2377-2378, 2379-2380, 2381-2382, 2383-2384, 2385-2386, 2387-2388, 2389-2390, 2391-2392, 2393-2394, 2395-2396, 2397-2398, 2399-2400, 2401-2402, 2403-2404, 2405-2406, 2407-2408, 2409-2410, 2411-2412, 2413-2414, 2415-2416, 2417-2418, 2419-2420, 2421-2422, 2423-2424, 2425-2426, 2427-2428, 2429-2430, 2431-2432, 2433-2434, 2435-2436, 2437-2438, 2439-2440, 2441-2442, 2443-2444, 2445-2446, 2447-2448, 2449-2450, 2451-2452, 2453-2454, 2455-2456, 2457-2458, 2459-2460, 2461-2462, 2463-2464, 2465-2466, 2467-2468, 2469-2470, 2471-2472, 2473-2474, 2475-2476, 2477-2478, 2479-2480, 2481-2482, 2483-2484, 2485-2486, 2487-2488, 2489-2490, 2491-2492, 2493-2494, 2495-2496, 2497-2498, 2499-2500, 2501-2502, 2503-2504, 2505-2506, 2507-2508, 2509-2510, 2511-2512, 2513-2514, 2515-2516, 2517-2518, 2519-2520, 2521-2522, 2523-2524, 2525-2526, 2527-2528, 2529-2530, 2531-2532, 2533-2534, 2535-2536, 2537-2538, 2539-2540, 2541-2542, 2543-2544, 2545-2546, 2547-2548, 2549-2550, 2551-2552, 2553-2554, 2555-2556, 2557-2558, 2559-2560, 2561-2562, 2563-2564, 2565-2566, 2567-2568, 2569-2570, 2571-2572, 2573-2574, 2575-2576, 2577-2578, 2579-2580, 2581-2582, 2583-2584, 2585-2586, 2587-2588, 2589-2590, 2591-2592, 2593-2594, 2595-2596, 2597-2598, 2599-2600, 2601-2602, 2603-2604, 2605-2606, 2607-2608, 2609-2610, 2611-2612, 2613-2614, 2615-2616, 2617-2618, 2619-2620, 2621-2622, 2623-2624, 2625-2626, 2627-2628, 2629-2630, 2631-2632, 2633-2634, 2635-2636, 2637-2638, 2639-2640, 2641-2642, 2643-2644, 2645-2646, 2647-2648, 2649-2650, 2651-2652, 2653-2654, 2655-2656, 2657-2658, 2659-2660, 2661-2662, 2663-2664, 2665-2666, 2667-2668, 2669-2670, 2671-2672, 2673-2674, 2675-2676, 2677-2678, 2679-2680, 2681-2682, 2683-2684, 2685-2686, 2687-2688, 2689-2690, 2691-2692, 2693-2694, 2695-2696, 2697-2698, 2699-2700, 2701-2702, 2703-2704, 2705-2706, 2707-2708, 2709-2710, 2711-2712, 2713-2714, 2715-2716, 2717-2718, 2719-2720, 2721-2722, 2723-2724, 27

There are also a large number of small farms in the district which are not included in the survey of large farms. There is also a large number of small farms in the district which are not included in the survey of large farms. There is also a large number of small farms in the district which are not included in the survey of large farms.

ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED

There are several hydro-electric developments of magnitude in the district included in the Western System in the United States. The main competitor of the Hydro-Electric Power Commission in the district included in the Western System is the United States Hydro-Electric Power Commission.

Light, Heat & Power Company, which owns three hydro-electric plants on the Ottawa River and one auxiliary steam plant, and distributes power in the City of Ottawa and vicinity in competition with the Corporation of the City of Ottawa. The suburban area served by the company includes Eastview, Britannia, part of Nepean Township, Gloucester Township and Westboro. Some power is also distributed to Hull and a block of power is sold to the municipality of Gatineau Point and to the Ottawa Electric Railway Company.

The Hull Electric Company of Hull, Quebec, also generates a surplus supply of electricity in addition to the requirements of its traction utility operating between Ottawa, Hull and Aylmer, and it sells electrical energy to various classes of consumers in the district of Hull and Aylmer.

The two present generating stations of the Hull Electric Company are located on the Quebec side of the Ottawa River at Deschenes Rapids.

The Hull Electric Company is said to be now seriously considering the early development of the site owned by the company at Pagan Falls on the Gatineau River about thirty miles from Ottawa for an ultimate capacity of 125,000 horsepower or more.

Transmission Lines

Up to October 15th, 1922, the Commission had constructed a total of eighteen miles of low voltage transmission lines forming a 4,160-volt network, supplying the rural districts in Nepean.

...that a power company, which under these rights-...
 ...to the power plant and the existing power plant,
 ...and electric power in the city of power and electric...
 ...competition with the operation of the city of power...
 ...which was owned by the power of the power company, electric...
 ...of the power company, electric power company and electric...
 ...power is also distributed to the city of power in the...
 ...to the maintenance of the power plant and to the power...
 ...power company.

The city electric power of the city, which, with the...
 ...a power company of the city in the city of the power...
 ...of the electric utility operating between the city and...
 ...plant, and it is also electric power to various places of...
 ...operation in the city of the city and plant.
 The two power companies operating in the city of the...
 ...company are located on the power side of the power plant...
 ...Washington, D.C.

The city electric power is sold to the city and...
 ...maintaining the power plant and the power plant...
 ...company of the power plant and the power plant...
 ...which was owned by the power of the power company, electric...
 ...power of the power company, electric power company and electric...

Examination of the

On the 15th day of June, 1911, the Commission has...
 ...a total of sixteen miles of the power transmission line...
 ...between a 4,100-volt power, carrying the power electric...
 ...between.

There are no high voltage transmission lines in the system that are owned by the Commission. The City of Ottawa obtains its power supply at 11,000 volts delivered through the high voltage transmission lines of the Ottawa & Hull Power & Manufacturing Company to the Ottawa City limits, at Chaudiere Bridge, whence it is taken to the Ottawa substation at the same voltage by means of underground cables which form part of the city's electrical distributing system.

Transforming & Distributing Stations

The Commission does not own any transforming substations on the system. The City of Ottawa steps down its power for municipal distribution by means of its own transforming equipment, and also steps down the power for the transmission to the rural district for which it receives remuneration at the rate of about \$8.00 per horse-power in addition to the price therefor billed to the city for power supply.

Local Distributing Systems

With the exception of the rural lines already mentioned, the Commission does not distribute retail power to consumers on the system. The Commission acts as a wholesale distributor only, and in the City of Ottawa the electricity is distributed by a local Commission.

Capital Investment

As all power required for the Ottawa System is purchased from and delivered to a receiving station of the local Hydro-Electric Commission of the City of Ottawa by the Ottawa and

(12)

There are no high voltage transmission lines in the system and are served by the distribution. The City of Detroit obtains its power supply at 11,000 volts delivered through the high-voltage transmission lines of the Edison & Bell Power Company, having working in the system this line, an overhead line, shown it is used in the system as shown in the same voltage by means of substations which have been at the city's electrical distributing system.

The Commission has not yet received any information regarding the status of the project. The City of Chicago is currently reviewing the project and will provide a report to the Commission by the end of the year. The Commission will continue to monitor the project and will provide further information as it becomes available.

2007-01-01 00:00:00

only, and in the city of London the electricity is distributed by a local commission.

2004 10 10 10:10:10

RECEIVED AT NEW YORK OFFICE OF THE DIRECTOR OF THE FBI
-1-
RECEIVED AT NEW YORK OFFICE OF THE DIRECTOR OF THE FBI

Hull Power & Manufacturing Company, the Commission's investment in this system is very small.

The following table shows the investment from 1913 to 1922, inclusive:

	<u>Fiscal Years ending October 31st</u>							
	1913 to 1915	1916	1917	1918	1919	1920	1921	1922
Metering Equipment	\$432	\$432	\$432	\$591	\$1,009	\$1,009	\$1,009	\$1,009
Rural Lines	-	-	-	-	-	-	4,896	32,053 #
	\$432	\$432	\$432	\$591	\$1,009	\$1,009	\$5,707	\$32,062

to September 30th, 1922, only.

In accordance with the recommendations of the Commission and pursuant to section 4 of the Rural Hydro-Electric Distribution Act, 1921, Orders-in-Council under the dates and in the amounts set forth below, were passed providing that 50% of the cost of constructing the primary rural lines in Nepean Township should be borne by the Province of Ontario as follows:

Date of Order-in- Council	Estimated Miles of Lines	Number of Applicants for power	Estimated Cost of Primary Lines	
			100%	50%
Sept. 20, 1921	12.00	51	\$15,146.00	\$7,573.00
Nov. 29, 1921	6.61	27	7,176.83	3,588.42
June 23, 1922	6.50	14	8,273.16	4,136.58
	25.11	92	\$30,595.99	\$15,298.00

As at October 31st, 1921, the engineers of the Commission estimated that additional funds in the amount of \$90,000.00 would be required for the construction of rural lines in Nepean Township during the years 1922 and 1923.

..11 and two of those are in the same

ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED

（一）（二）（三）（四）（五）（六）（七）（八）（九）（十）（十一）（十二）（十三）（十四）（十五）（十六）（十七）（十八）（十九）（二十）（二十一）（二十二）（二十三）（二十四）（二十五）（二十六）（二十七）（二十八）（二十九）（三十）（三十一）（三十二）（三十三）（三十四）（三十五）（三十六）（三十七）（三十八）（三十九）（四十）（四十一）（四十二）（四十三）（四十四）（四十五）（四十六）（四十七）（四十八）（四十九）（五十）（五十一）（五十二）（五十三）（五十四）（五十五）（五十六）（五十七）（五十八）（五十九）（六十）（六十一）（六十二）（六十三）（六十四）（六十五）（六十六）（六十七）（六十八）（六十九）（七十）（七十一）（七十二）（七十三）（七十四）（七十五）（七十六）（七十七）（七十八）（七十九）（八十）（八十一）（八十二）（八十三）（八十四）（八十五）（八十六）（八十七）（八十八）（八十九）（九十）（九十一）（九十二）（九十三）（九十四）（九十五）（九十六）（九十七）（九十八）（九十九）（一百）

1470-1471, 1472, 1473, 1474, 1475, 1476, 1477, 1478, 1479, 1480, 1481, 1482, 1483, 1484, 1485, 1486, 1487, 1488, 1489, 1490, 1491, 1492, 1493, 1494, 1495, 1496, 1497, 1498, 1499, 1500, 1501, 1502, 1503, 1504, 1505, 1506, 1507, 1508, 1509, 1510, 1511, 1512, 1513, 1514, 1515, 1516, 1517, 1518, 1519, 1520, 1521, 1522, 1523, 1524, 1525, 1526, 1527, 1528, 1529, 1530, 1531, 1532, 1533, 1534, 1535, 1536, 1537, 1538, 1539, 1540, 1541, 1542, 1543, 1544, 1545, 1546, 1547, 1548, 1549, 1550, 1551, 1552, 1553, 1554, 1555, 1556, 1557, 1558, 1559, 1560, 1561, 1562, 1563, 1564, 1565, 1566, 1567, 1568, 1569, 1570, 1571, 1572, 1573, 1574, 1575, 1576, 1577, 1578, 1579, 1580, 1581, 1582, 1583, 1584, 1585, 1586, 1587, 1588, 1589, 1590, 1591, 1592, 1593, 1594, 1595, 1596, 1597, 1598, 1599, 1600, 1601, 1602, 1603, 1604, 1605, 1606, 1607, 1608, 1609, 1610, 1611, 1612, 1613, 1614, 1615, 1616, 1617, 1618, 1619, 1620, 1621, 1622, 1623, 1624, 1625, 1626, 1627, 1628, 1629, 1630, 1631, 1632, 1633, 1634, 1635, 1636, 1637, 1638, 1639, 1640, 1641, 1642, 1643, 1644, 1645, 1646, 1647, 1648, 1649, 1650, 1651, 1652, 1653, 1654, 1655, 1656, 1657, 1658, 1659, 1660, 1661, 1662, 1663, 1664, 1665, 1666, 1667, 1668, 1669, 1670, 1671, 1672, 1673, 1674, 1675, 1676, 1677, 1678, 1679, 1680, 1681, 1682, 1683, 1684, 1685, 1686, 1687, 1688, 1689, 1690, 1691, 1692, 1693, 1694, 1695, 1696, 1697, 1698, 1699, 1700, 1701, 1702, 1703, 1704, 1705, 1706, 1707, 1708, 1709, 1710, 1711, 1712, 1713, 1714, 1715, 1716, 1717, 1718, 1719, 1720, 1721, 1722, 1723, 1724, 1725, 1726, 1727, 1728, 1729, 1730, 1731, 1732, 1733, 1734, 1735, 1736, 1737, 1738, 1739, 1740, 1741, 1742, 1743, 1744, 1745, 1746, 1747, 1748, 1749, 1750, 1751, 1752, 1753, 1754, 1755, 1756, 1757, 1758, 1759, 1760, 1761, 1762, 1763, 1764, 1765, 1766, 1767, 1768, 1769, 1770, 1771, 1772, 1773, 1774, 1775, 1776, 1777, 1778, 1779, 1780, 1781, 1782, 1783, 1784, 1785, 1786, 1787, 1788, 1789, 1790, 1791, 1792, 1793, 1794, 1795, 1796, 1797, 1798, 1799, 1800, 1801, 1802, 1803, 1804, 1805, 1806, 1807, 1808, 1809, 1810, 1811, 1812, 1813, 1814, 1815, 1816, 1817, 1818, 1819, 1820, 1821, 1822, 1823, 1824, 1825, 1826, 1827, 1828, 1829, 1830, 1831, 1832, 1833, 1834, 1835, 1836, 1837, 1838, 1839, 1840, 1841, 1842, 1843, 1844, 1845, 1846, 1847, 1848, 1849, 1850, 1851, 1852, 1853, 1854, 1855, 1856, 1857, 1858, 1859, 1860, 1861, 1862, 1863, 1864, 1865, 1866, 1867, 1868, 1869, 1870, 1871, 1872, 1873, 1874, 1875, 1876, 1877, 1878, 1879, 1880, 1881, 1882, 1883, 1884, 1885, 1886, 1887, 1888, 1889, 1890, 1891, 1892, 1893, 1894, 1895, 1896, 1897, 1898, 1899, 1900, 1901, 1902, 1903, 1904, 1905, 1906, 1907, 1908, 1909, 1910, 1911, 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919, 1920, 1921, 1922, 1923, 1924, 1925, 1926, 1927, 1928, 1929, 1930, 1931, 1932, 1933, 1934, 1935, 1936, 1937, 1938, 1939, 1940, 1941, 1942, 1943, 1944, 1945, 1946, 1947, 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 215

[illegible]

1. The Commission has received information from the Department of the Interior, Bureau of Land Management, that the following lands are owned by the United States and are available for disposal:

To and from Industrial -small business-	To and from -small business-	To and from -small business-	To and from -small business-
2000	2001	2002	2003
\$0.000,00	\$0.000,00	10	\$0.00
\$0.000,00	\$0.000,00	11	\$0.00
\$0.000,00	\$0.000,00	12	\$0.00
\$0.000,00	\$0.000,00	13	\$0.00

As of October 1941, the population of the Commission estimated that additional work in the amount of \$10,000,000 would be required for the construction of rural lines in Japan from 1941 to 1945.

At October 31st, 1921, the total depreciable capital was the whole of the capital investment, namely about \$4,000, while no reserve for renewals had been established at that date. At September 30th, 1922, the depreciable capital was about \$33,000, and if the proposed extensions be carried out will be about \$95,000 at October 31st, 1923.

Reserve for Sinking Fund

The sinking fund payments by the City of Ottawa together with interest accumulated thereon to October 31st, 1921, amounted to \$86.62, which is applicable to the investment in the metering equipment of the Commission in the Ottawa and Hull Power & Manufacturing Company's generating plant.

COPY
The first rural line expenditures were made in 1921, so that if the usual course of the Commission be followed the collection of sinking fund chargeable against these rural lines will be commenced in the years 1926 and 1927, or five years after the date of first operation.

Reserve for Contingencies

The view expressed in the following extract from the accompanying report of our Consulting Engineer is pertinent and is approved by us:

"Up to the end of 1921 no reserve for contingencies had been established.

Having in mind the contemplated extended construction of rural lines and the heavy losses which might be occasioned to them through catastrophe, it is felt that a suitable rate per horse-power consumed should

At October 1951, the total expenditures against
the share of the capital investment, namely about \$6,000,
while no reserves for payments had been established at that
date. At September 30, 1951, the expenditures against the
share \$12,000, and the amount estimated to be paid out will
be about \$24,000 at October 31, 1951.

Summary of Financial Data

The financial data appears in the list of items reported
with interest accumulated through to October 31, 1951,
amounted to \$28.61, which is equivalent to the investment
in the operating equipment of the foundation in the United
and will cover a substantial portion of the operating costs.
The first year of operation was held in 1951.
As far as the total assets of the foundation are concerned, the
possibility of obtaining that chargeable against those items
will be discussed in the years 1952 and 1953, or five years
after the date of first operation.

Summary of Expenditures

The view expressed in the following report from the
operating report of the foundation is as follows:
and is approved by me:
At the end of 1951 no reserves for contingencies
had been established.
Having in mind the substantial interest which
operating of such items and the heavy losses which
might be incurred in such through contingencies, it is
felt that a realistic view for future years should be

be charged to rural customers or some other means found so that a sufficient fund might be available to be drawn on in case of emergencies. When a fund of about \$5,000 will have been built up, the rates can be readjusted to suit the conditions found after several further years of experience".

Accounts Receivable

The sum of \$19,483.21 was due by the City of Ottawa as at October 31st, 1921, for accounts receivable but was paid in full prior to December 31st, 1921.

Results of Operations

The following is an operating account for the four years ending October 31st, 1921, showing total revenue, cost of power purchased, operating expenses and fixed charges (cents omitted):

<u>Revenue</u>	<u>1918</u>	<u>1919</u>	<u>1920</u>	<u>1921</u>
From the City of Ottawa	\$82,276	\$86,844	\$95,622	\$104,087
<u>Cost of operating, including portion of administrative expenses</u>				
Power purchased from the Ottawa & Hull Power & Manufacturing Co., Ltd	\$81,611	\$86,216	\$94,700	\$103,329
Operating Expenses	627	572	854	690
Interest on capital invested	28	40	50	50
Provision for sinking fund	10	14	18	18
Total Costs	\$82,276	\$86,844	\$95,622	\$104,087
Total horse-power purchased and billed	5829	6158	6764	7654
Cost per horse-power billed	\$14.11	\$14.10	\$14.14	\$13.59

From the above, it will be noted that the City of Ottawa has been charged with the total cost of all power supplied to it excepting provision for renewals and contingencies as previously commented upon.

The following table indicates the annual cost figures as percentages of the total cost of power per annum:

	Fiscal years ending October 31,			
	1918	1919	1920	1921
Power Purchased	99.20	99.27	99.05	99.28
Overhead & General Expenses	0.76	0.66	0.89	0.66
Interest	0.03	0.06	0.05	0.05
Sinking Fund	0.01	0.01	0.01	0.01
	100.00%	100.00%	100.00%	100.00%

A comparison of the cost per horse-power purchased by the Commission and the cost to the City of Ottawa as billed by the Commission is as follows:

	Cost per H.P. purchased	Cost per H.P. City of Ottawa
1918	\$14.00	\$14.11
1919	14.00	14.10
1920	14.00	14.14
1921	13.50	13.59

The rural lines in Nepean Township were placed in operation in February 1922, and as the accounts for the year ending October 31st, 1922, are not yet available, they have not been included in this report.

It appears, however, that power required for these rural lines is purchased from the City of Ottawa at \$21.00 per horse-power or approximately \$8.00 per horse-power more than is paid

From the assets, it will be noted that the City of London has been charged with the total sum of all loans provided in its operating expenditure the revenue and maintenance of the local government system.

The following table indicates the actual cost of the maintenance of the City of London for the year 1981.

1981	1980	1979	1978
Power purchased	99.27	99.08	99.18
Gas & electricity	0.75	0.88	0.88
Interest	0.08	0.08	0.08
Electricity	0.08	0.12	0.11

100.00 100.00 100.00 100.00

A comparison of the City's 1981-82 expenditure with the 1980-81 expenditure and the 1979-80 expenditure is set out in the following table:

1981	1980	1979
Power purchased	114.10	114.10
Gas & electricity	14.10	14.10
Interest	14.00	14.00
Electricity	13.00	13.00

The table shows that the City's expenditure on power purchased in 1981 was 114.10, compared with 114.10 in 1980 and 114.10 in 1979. The City's expenditure on gas and electricity in 1981 was 14.10, compared with 14.10 in 1980 and 14.10 in 1979. The City's expenditure on interest in 1981 was 14.00, compared with 14.00 in 1980 and 14.00 in 1979. The City's expenditure on electricity in 1981 was 13.00, compared with 13.00 in 1980 and 13.00 in 1979.

It should be noted that the City's expenditure on power purchased in 1981 was 114.10, compared with 114.10 in 1980 and 114.10 in 1979. The City's expenditure on gas and electricity in 1981 was 14.10, compared with 14.10 in 1980 and 14.10 in 1979. The City's expenditure on interest in 1981 was 14.00, compared with 14.00 in 1980 and 14.00 in 1979. The City's expenditure on electricity in 1981 was 13.00, compared with 13.00 in 1980 and 13.00 in 1979.

for power supplied to it; this difference is represented by the estimated cost of \$4.00 for transformation, \$3.00 for a proportionate part of the use of the distribution system and \$1.00 for transmission at 10,000 volts.

In addition to the cost of power of \$21.00 per horse-power, the customers on the rural lines pay the operating and maintenance expenses of the lines, interest on capital invested therein, provision for renewals and sinking fund on a twenty-year basis.

Population Served and Growth of Market for Power

The total population of the area tributary to the system at the end of 1921 was approximately 146,000 of which about 110,000 were in the city of Ottawa and of these the customers of the local Hydro-Electric Commission numbered 11,532. The small number of users of power supplied by the Commission in relation to population is due to the competition of the Ottawa Electric Company, which sells power in the City of Ottawa and is the sole distributor in Eastview and in the district between Britannia and Ottawa. The Company, we understand, serves a greater number of customers than does the Ottawa Hydro-Electric Commission. The use of electricity per ordinary customer is greater in this district than in many others, and there is a continual growth in load which indicates that the demands are growing.

Table No. 1 following shows the growth of population and the number of customers of the local Commission in the City of Ottawa from 1913 to 1921, inclusive, and Table No.2, the

market statistics for the year ending October 31st, 1921:

Table No.1

Year	Total Number of Consumers	Population
1913	3,735	100,180
1914	7,350	100,180
1915	8,538	101,785
1916	9,207	100,163
1917	10,007	100,300
1918	10,436	100,561
1919	10,393	107,732
1920	10,939	107,732
1921	11,532	110,708

Table No.2

Table of Market Statistics - City of Ottawa

Population	110,708
Number of Consumers	11,532
Percentage of Consumers to Population	10.5
Horse-power billed in 1921	7,654
Billed horse-power per consumer	0.66
Billed horse-power per capita	0.06

The number of consumers served by the Commission in the rural districts of the Ottawa System on October 31st, 1922, averaged 4.7 per mile of transmission line.

Relations with Ottawa Electric Company

The Ottawa Hydro-Electric Commission and the Ottawa Electric Company being rival vendors of power within the limits of the Ottawa System, it is but natural that a certain amount of rivalry between the two should develop. Complaints by the company of

Source: Statistics for the year ending September 30, 1955.

Table 1-1

Year	Total number of employees	Population
1955	11,200	110,100
1954	10,800	108,100
1953	10,400	106,100
1952	10,000	104,100
1951	9,600	102,100
1950	9,200	100,100
1949	8,800	98,100
1948	8,400	96,100
1947	8,000	94,100
1946	7,600	92,100
1945	7,200	90,100
1944	6,800	88,100
1943	6,400	86,100
1942	6,000	84,100
1941	5,600	82,100
1940	5,200	80,100
1939	4,800	78,100
1938	4,400	76,100
1937	4,000	74,100
1936	3,600	72,100
1935	3,200	70,100
1934	2,800	68,100
1933	2,400	66,100
1932	2,000	64,100
1931	1,600	62,100
1930	1,200	60,100
1929	800	58,100
1928	400	56,100
1927	200	54,100
1926	100	52,100
1925	50	50,100
1924	25	48,100
1923	12	46,100
1922	6	44,100
1921	3	42,100
1920	1	40,100
1919	0	38,100
1918	0	36,100
1917	0	34,100
1916	0	32,100
1915	0	30,100
1914	0	28,100
1913	0	26,100
1912	0	24,100
1911	0	22,100
1910	0	20,100
1909	0	18,100
1908	0	16,100
1907	0	14,100
1906	0	12,100
1905	0	10,100
1904	0	8,100
1903	0	6,100
1902	0	4,100
1901	0	2,100
1900	0	1,100
1899	0	0

Table 1-2

Table 1-2: Total number of employees - 1955

Year	Total number of employees	Population
1955	11,200	110,100
1954	10,800	108,100
1953	10,400	106,100
1952	10,000	104,100
1951	9,600	102,100
1950	9,200	100,100
1949	8,800	98,100
1948	8,400	96,100
1947	8,000	94,100
1946	7,600	92,100
1945	7,200	90,100
1944	6,800	88,100
1943	6,400	86,100
1942	6,000	84,100
1941	5,600	82,100
1940	5,200	80,100
1939	4,800	78,100
1938	4,400	76,100
1937	4,000	74,100
1936	3,600	72,100
1935	3,200	70,100
1934	2,800	68,100
1933	2,400	66,100
1932	2,000	64,100
1931	1,600	62,100
1930	1,200	60,100
1929	800	58,100
1928	400	56,100
1927	200	54,100
1926	100	52,100
1925	50	50,100
1924	25	48,100
1923	12	46,100
1922	6	44,100
1921	3	42,100
1920	1	40,100
1919	0	38,100
1918	0	36,100
1917	0	34,100
1916	0	32,100
1915	0	30,100
1914	0	28,100
1913	0	26,100
1912	0	24,100
1911	0	22,100
1910	0	20,100
1909	0	18,100
1908	0	16,100
1907	0	14,100
1906	0	12,100
1905	0	10,100
1904	0	8,100
1903	0	6,100
1902	0	4,100
1901	0	2,100
1900	0	1,100
1899	0	0

The number of employees covered by the Commission in 1955

Table 1-2: Total number of employees - 1955

Table 1-2: Total number of employees - 1955

Table 1-2: Total number of employees - 1955

The Commission is authorized to collect information from the Commission

Table 1-2: Total number of employees - 1955

Table 1-2: Total number of employees - 1955

Table 1-2: Total number of employees - 1955

injustice to it in the operations of the Commission were voiced before us by representatives of the Company and replied to by representatives of the Commission. The main complaints may be briefly summarized as follows:

- (1) Because the local Hydro-Electric Commission supplies all municipal requirements such as street and park lighting at high rates, a low rate can be given to householders, being a benefit to the patrons of the Hydro who are very much in the minority, and a grave injustice to all other citizens very much in the majority, who do not use Hydro service, and many of whom do not use any electric service, but who have to pay their share of the municipal lighting accounts.

In support of this complaint it was stated on behalf of the company that,

COPY

"the profit derived from street lighting enables the Hydro management in this city to discriminate in rates or in methods of charging. It would appear that electricity is being sold in some cases below cost for reasons that are obvious".

Mr. J. A. Ellis, Chairman of the local Commission, in reply to this complaint, acknowledged that the domestic rates were low, being 2 cents, 1 cent or one-half cent according to the power consumed. Mr. R. T. Jeffrey, one of the Engineers of the Commission, stated that Ottawa was the only municipality in the Province having a one-half cent rate at that time, and that the Commission had recommended the local Commission to discontinue this rate, but such recommendation had not been adopted.

In answer to the complaint, Mr. Ellis stated that for the past year the Ottawa Commission had a gross surplus of

injunction is to be the responsibility of the Commission and not of the
bottom of the representatives of the company and the public in the
representatives of the Commission. The Commission may be
advised by the Commission as follows:

Because the local Hydro-Electric Commission
supplies all municipal requirements such as
street and park lighting at high rates, a
law will be given to the Commission, which
a benefit to the interest of the Hydro who
are very much in the minority, and a great
injustice to all other citizens very much
in the majority, who do not own Hydro stock,
and many of whom do not use any electric cur-
rent, but who have to pay their share of the
municipal lighting system.

In answer to this complaint it was stated as follows:

The company that

the Hydro-Electric Commission from street lighting
supplies the same amount in this city
as elsewhere, in fact on a basis of
square feet. It would appear that electrically
it is not as good as some other cities but
that is not the case.

Mr. A. H. Ellis, Chairman of the local Commission, in reply

to the complaint, recommended that the electric rates be put

down 5 cents, I sent or one-half cent according to the power

company. Mr. R. T. Jeffrey, one of the engineers of the com-

mission, stated that there was the only possibility in the

Commission having a one-half cent rate as that plan, and that the

Commission had recommended the local Commission to discontinue

this rate, but such recommendation had not been adopted.

In answer to the complaint, Mr. Ellis stated that the

great part of the electric system was a private property of

\$85,733.71, of which \$36,743.43 was set aside for depreciation, leaving a net surplus of \$48,990.28. He further stated that during the years 1916 to 1921, there was a loss of \$23,000 on street lighting and made the following comments in regard to last year's operations:-

"How on earth could we, out of a total revenue from street lighting of \$44,833.90, make all that money If every cent of the street lighting was profit, it would not account for our surplus".

"The profit comes absolutely and entirely from domestic lighting and commercial".

One reason given by him for the retention of the one-half cent rate was that the company operated gas works and gave a discount of five per cent. on gas bills to customers whom it supplied with both gas and electricity.

Quoting from his statement:

"They charge too much for gas and they discriminate as against Hydro customers in their gas bills, in other words, a customer who will take electric current from the company gets his gas 5% cheaper than if he takes his electric current from us".

It appears to us that the rates paid to the Ottawa Commission for street and park lighting do not affect the Ottawa Electric Company unfairly. Mr. Ellis speaking for the Ottawa Commission before us stated that the Commission was quite willing that the Ottawa Electric Company should have the business at the rates paid the Commission. The rate of one-half cent per kilowatt for domestic rates appears to be very low. It is remarkable that the Ontario Hydro-Electric Commission has in effect indorsed the complaint of the Ottawa Electric Company by

directing the local Commission to increase its domestic rate from one-half cent to one cent. This direction the Ottawa Commission has not complied with and considering the flourishing condition of its finances, it is difficult to see why the direction should have been given.

As has been stated in previous reports submitted by us to Your Honour, the practice and policy of the Commission where the Commission is in competition with or in opposition to other vendors of power will be dealt with by us in a General Report.

- (2) The books of the Hydro-Electric Commission of Ottawa are not audited properly.

The evidence given before us showed that all vouchers are passed upon by the municipal auditor and that at least once a year an auditor from the Head Office of the Commission checks over the accounts to see that they are properly classified and that the books are kept in proper shape.

Mr. R. C. McCollum, the auditor, from the head office of the Commission, stated that the municipal auditor at Ottawa was responsible for the municipal Hydro-Electric accounts and that the Commission, through its auditors, installed a similar bookkeeping system in every Hydro municipality, in order that there might be uniformity in the keeping of accounts, particularly with respect to the classification of expenses.

Altogether, the total number of the American war
from 1900-1914 was 100,000. This figure was 100,000
more than the total number of the American war
from 1914-1918, it is difficult to say why the
American people have been killed.

It has been stated in previous reports submitted by me to your Honors, the Committee and body of the Commission that the Committee is in competition with us in regard to the study of the problem of the child with us in a general way.

(S) The review of the 1968-1970 period
between the 1968 and 1970 periods

The following is a list of the books which are now in the possession of the Library of the University of California, Berkeley, and which are now being used for the purpose of the study of the history of the United States.

NY 2-1, 201111, the subject from the past village of

ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED

For comments and questions, please contact the author at andrew@cs.cmu.edu.

that the Commission should be authorized to conduct such studies.

Downloaded from <http://ajphaphysiol.physiology.org/> at Univ of California, San Diego on May 12, 2015

These rights are subject to the following conditions:

* members to establish a new set of regional offices

He said:

"I have never felt any need to worry about the Ottawa accounts or their revenue".

In our opinion, this complaint is not well founded.

- (3) The Ottawa Power Commission paid in taxes only \$1,675.21, and the total taxes of the Ottawa Electric Company in 1922 amounted to \$78,000.00.

By far the greater part of the taxes paid by the Ottawa Electric Company are levied on property of classes not owned by the Hydro-Electric Commission. The taxes paid by the Ottawa Electric Company on properties that may fairly be compared with the properties owned by the Ottawa Hydro-Electric Commission appear to amount to less than \$20,000 per annum. That it is hardly fair to increase the taxes of those who do not take power from the Hydro-Electric Commission in order that buyers of power from the Hydro-Electric Commission should get power at lower rates would seem to be the opinion of the members of the Hydro-Electric Commission themselves. In his evidence before us, Chairman Ellis said:

"Speaking for the (Ottawa) Commission we do not care whether we pay taxes or not".

In reply to our inquiry:

"You would not offer any opposition to a change in the law which would put you on the same footing as others in the matter of taxes?"

Mr. Ellis answered:

"No".

In view of the attitude of the local Commission there should be little difficulty in removing all cause for complaint.

He said:

"I have known Yell and know the way about the
Oreman accounts on this account."

It was explained, this explanation is not correct.

(2) The Orem River is said to have
only \$1,000.00, and the total amount of the
Oreman River is \$100,000.00
to \$10,000.00.

By the first part of the first part of the first

the first part of the first part of the first

By the first part of the first part of the first

the first part of the first part of the first

the first part of the first part of the first

the first part of the first part of the first

the first part of the first part of the first

the first part of the first part of the first

the first part of the first part of the first

the first part of the first part of the first

the first part of the first part of the first

Chairman Ellis said:

"I have known Yell and know the way about the
Oreman accounts on this account."

In reply to one inquiry:

"I have known Yell and know the way about the
Oreman accounts on this account."

Mr. Ellis answered:

"Yes."

In view of the results of the first part of the first

the first part of the first part of the first

We shall not deal further here with the question of taxation of the property of the Hydro-Electric Commission of Ottawa, but we shall deal with the question of taxation of the property of the Hydro-Electric Power Commission of Ontario and the local Commission in our General Report.

- (4) The local Commission uses the staff of the City Treasurer and City Auditor in connection with its work.

This complaint was based on a statement made by the City Auditor in his annual report to the effect that he had vouched for payments and countersigned cheques for the local Commission. It appears to be the custom for local Hydro Commissions to have their accounts audited by municipal auditors. The practice appears to us to be a proper one. The cost of the services rendered in the City Treasurer's Department is trifling.

Our findings and conclusions upon the more important features of the system may be summarized as follows:

1. The capital expenditure of the Commission upon the system is small and including the completion of rural lines now under construction will amount on October 31st, 1923, to approximately \$96,000, if the estimated cost of extensions and betterments during 1922 and 1923 be not exceeded. This capital expenditure, with the exception of \$1,000 for meters, is in respect of rural lines.

2. The market for power is divided between the Commission and other interests. The proportion of the total population served by all at the present time is about ninety per cent. The use of

electric power per ordinary customer is apparently much above the general average.

3. The ultimate demand of the Ottawa System can be met by the development of local power sites. The capacity of available power sites amounts to 1,000,000 horse-power or more.

4. The development of power sites in the vicinity of Ottawa would provide power to supply not only the Ottawa but also the Rideau and St. Lawrence Systems. Interconnecting lines between the three systems would render this feasible without the necessity of large expenditure, as the transforming and distributing stations of the Rideau and St. Lawrence Systems are designed to operate at the same voltage. The frequency of the power generated by all the important plants in the District is 60 cycles, similar to that used in the three systems.

5. A reserve for renewals should be established after carefully considering the estimated useful life of the meters and rural lines.

6. The question of sinking fund should be considered in relation to the term of years during which a fund that will be sufficient to provide for the proportionate amount of capital cost chargeable to the Township of Nepean is to be built up. The agreement with the Commission specifies a term of twenty-years, whereas the Power Commission Act provides for a thirty-year term.

7. No reserve for contingencies has as yet been established. It is suggested that such a reserve be created by making a charge per horse-power delivered to the rural customers, such

electric power for various purposes is approximately equal to the total output.

2. The electric demand of the United States is not

by the development of local power plants. The capacity of

electric power plants is estimated at 1,000,000 kilowatts of power.

3. The development of power plants in the United States

is not sufficient to supply the demand for power in the United States.

4. The electric demand of the United States is not

by the development of local power plants. The capacity of

electric power plants is estimated at 1,000,000 kilowatts of power.

5. The development of power plants in the United States

is not sufficient to supply the demand for power in the United States.

6. The electric demand of the United States is not

by the development of local power plants. The capacity of

electric power plants is estimated at 1,000,000 kilowatts of power.

7. The development of power plants in the United States

is not sufficient to supply the demand for power in the United States.

8. The electric demand of the United States is not

by the development of local power plants. The capacity of

electric power plants is estimated at 1,000,000 kilowatts of power.

9. The development of power plants in the United States

is not sufficient to supply the demand for power in the United States.

10. The electric demand of the United States is not

by the development of local power plants. The capacity of

electric power plants is estimated at 1,000,000 kilowatts of power.

11. The development of power plants in the United States

charge should be included in the cost of power and the yearly results noted, and when a fund shall have been built up apparently ample to provide for damage to the rural lines due to catastrophe and accidents, a permanent yearly charge for the fund may be fixed.

8. The operating records indicate that the system is being operated so as to supply power at cost, there being no difference between total revenues and the total costs as shown on the books of the Commission.

9. After hearing all parties we reached the conclusion that aside from the question of taxation, the Ottawa Electric Company has little, if any, ground for complaint. In the matter of taxation the local Commission has expressed its intention of offering no opposition to the passage of a law that will place the local Commission and the Ottawa Electric Company upon an equality.

10. The management of the local system by the Ottawa Hydro-Electric Commission appears to us to be excellent.

11. Ottawa is a most favoured point for consumers of electric power. The sources of power nearby assure rates to the citizens of Ottawa that in all probability are lower than the rates in any other place of equal population.

DATED AT TORONTO, *Sept 6th* 1903

W. D. Gregory, Chairman
M. J. Haney
Lloyd Harris
J. Allan Ross
R. A. Ross

...should be included in the cost of power and the yearly
 ...and that a full staff have been built up accordingly
 ...to provide for damage to the plant lines and to maintain
 ...a permanent staff of men for the day and night
 6. The operating system indicates that the system is
 ...to be kept in good order, some being in
 ...between local systems and the main system as shown
 on the plan of the distribution.
 7. After having all parties we showed the commission
 that while there was question of taxation, the main business
 company has little, it was shown for comparison. In the matter
 of taxation the local commission has approved the intention of
 ...to the extent of a few that will give
 the local commission and the main system company with an
 equality.
 10. The management of the local system by the commission
 system-system commission system is to be maintained.
 11. There is a great difference in the management of
 system power. The service of power being better than in
 the system of power that is all available and lower cost
 the value is not shown at great commission.

DATED AT TORONTO, 1912

W. D. Gregory, Chairman
 M. J. Haney
 Lloyd Harris
 J. A. Ross

